



CARSWELL/PLANT 4 RESTORATION ADVISORY BOARD

Fact Sheet #15
February 7, 2002

NAS FORT WORTH JOINT RESERVE BASE INSTALLATION RESTORATION PROGRAM

This is the 15th in a series of fact sheets focusing on the Installation Restoration Program (IRP) at the Naval Air Station Fort Worth Joint Reserve Base (NAS Fort Worth JRB). The NAS Fort Worth JRB, formerly Carswell Air Force Base (AFB), is in the process of planning and conducting activities for the identification, remediation, and closure of contaminated sites at the base.

The IRP is the Department of Defense's (DoD) primary mechanism for environmental response actions on U.S. Air Force installations. IRP activities are governed by provisions of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Resource Conservation and Recovery Act (RCRA), and other applicable federal and state regulations. These activities are being conducted through the combined efforts of the Air Force Center for Environmental Excellence (AFCEE) and the Air Force Base Conversion Agency (AFBCA). Under provisions of RCRA, the Air Force identified 68 solid waste management units (SWMU) and 20 areas of concern (AOC) at NAS Fort Worth JRB for further study and clean up, if necessary.

CARSWELL ON-BASE

RCRA FACILITY INVESTIGATION OF SOLID WASTE MANAGEMENT UNITS 49 AND 50

SWMUs 49 and 50 are former aircraft washing areas 1 and 2, respectively. The Final Work Plan for SWMU 50 was submitted to AFCEE in September 2000, and the first round of field work was conducted at this location in December 2000. Initial results from the December 2000 sampling event were validated, and it was determined that further soil sampling was necessary at SWMU 50. This soil sampling was conducted in June 2001. In addition, a groundwater investigation was conducted in July 2001 to determine to what extent, if any, groundwater has been impacted. Monitoring wells were installed, and the first round of groundwater sampling was conducted in July 2001. The second round of groundwater sampling was conducted in September 2001, and the third round was conducted in November 2001. The results of the soil and groundwater investigation will determine if additional sampling is necessary or if SWMU 50 can be submitted for closure.

Soil and groundwater sampling activities at SWMU 49 began last month. Soil samples were collected from four locations surrounding the location of the former aircraft washing area. One monitoring well was installed in the downgradient direction, and a groundwater sample was collected. Based on the results of this sampling effort, SWMU 49 may require additional sampling or may be submitted for closure.

LIMITED RCRA FACILITY INVESTIGATION OF SOLID WASTE MANAGEMENT UNITS 54 AND 55

The Final Work Plans to conduct a limited RCRA Facility Investigation (RFI) were completed in September 2000 for the Storm Water Interceptors (SWMU 54) and the East Gate Oil/Water Separator (SWMU 55).

Soil sampling was conducted for SWMUs 54 and 55 to determine if these units have released hazardous constituents to the environment. The first round of sampling was conducted in December 2000. The second round of sampling was completed in June 2001, and the third round was completed in December 2001. The purpose of the additional rounds of sampling is to fully delineate and characterize contaminants of potential concern at the site before SWMUs 54 and 55 can be submitted for closure.

RCRA FACILITY INVESTIGATION OF LANDFILLS CONTINUES

RFIs continue at six former landfills, also referred to as SWMUs. These landfills include Landfill 7 (SWMU 17), Landfill 3 (SWMU 26), Landfill 1 (SWMU 28), Landfill 2 (SWMU 29), Landfill 9 (SWMU 30), and Landfill 6 (SWMU 62). The results of the RFIs will determine if a source of potential contamination exists and if the source has impacted the soil, groundwater, surface water, or sediments at or near each landfill. Work plans were prepared for the fourth phase of investigations at Landfills 1, 2, 3, 6, 7, and 9, and field work for the fourth phase was completed in February 2001. Additional sampling was conducted in June 2001. Based on evaluation of the data, interim remedial actions, also referred to as "hot spot removals," were necessary prior to the completion of the RFI for all but one landfill (Landfill 3). These hot spot removals began in October 2001 and concluded last month. A Draft RFI Report will be submitted later this year to AFCEE for review. As Landfill 3 did not require any interim actions, the RFI Report for this unit was submitted to the Texas Natural Resource Conservation Commission (TNRCC) and the Environmental Protection Agency (EPA) for review in November 2001. TNRCC approved closure of Landfill 3 in December 2001.

WASTE ACCUMULATION AREA RCRA FACILITY INVESTIGATION

An RFI of 16 Waste Accumulation Areas (WAA) was completed in June 1999. Based on the results of the initial investigation, an RFI report recommending regulatory closure was prepared for 7 of the 16 WAAs and submitted to the regulators in July 2000. Closure of these seven WAAs was approved by TNRCC in November 2000. A Phase II soil and groundwater investigation was performed on the remaining nine WAAs in May 2000. Based on the results of the Phase II investigation, a Final RFI Report recommending site closure was submitted to TNRCC for four additional sites in March 2001. The TNRCC granted closure of these four sites in June 2001. Additional investigations and/or remedial actions will be required at the remaining five WAAs. Work plans for additional soil and groundwater sampling were submitted to AFCEE in January 2001, and the additional sampling was conducted at the remaining five sites in June 2001. Based on the results of the June 2001 sampling event, hot spot removals were necessary at three WAAs and began in October 2001. The hot spot removals were completed last month, and an RFI report will be prepared after the results from the hot spot removals are obtained.

RCRA FACILITY INVESTIGATION OF SOLID WASTE MANAGEMENT UNITS 19, 20, 21, AND AREA OF CONCERN 19

The first round of field sampling activities was completed in May 2000 for RCRA Facility Investigations of the following areas: former Fire Training Area No. 2 (SWMU 19), former aboveground waste fuel storage tank (SWMU 20), former underground storage tank (SWMU 21), and former fire training area (AOC 19).

A geophysical survey was completed at SWMUs 19, 20, and 21 and AOC 19 in February 2001. Monitoring wells were installed at these sites in February, and groundwater sampling was conducted in February, April, and June 2001. Based on the results of this survey, several areas of buried metal were excavated, and additional soil sampling was conducted in August 2001. The anomalies were caused by buried scrap metal such as steel pipes, metal plates, wire, and road construction debris. After the collection of soil data is complete, the Draft Site Investigation (SI) Report for AOC 19 will be prepared. Additional rounds of groundwater sampling at SWMU 19 were conducted in October and December 2001. After the results are received, an RFI Report will be prepared and submitted for review.

UNDERGROUND STORAGE TANK PROGRAM

Additional sampling of groundwater at AOC 1, the Base Service/Gas Station, and the delineation of contaminants further downgradient of AOC 1 were requested by the TNRCC in January 2000. The delineation consisted of the installation and sampling of three downgradient off-base wells and the continued groundwater monitoring of existing on-base wells. Three off-base wells were installed and sampled in May 2000, and the first semi-annual groundwater sampling at seven existing on-base wells was performed in April 2000. A Final Annual Groundwater Monitoring Report for 2000 was submitted to TNRCC in July 2001. The most recent semi-annual sampling event occurred in January 2002. Surface water samples collected from the West Fork of the Trinity during previous sampling events revealed no hydrocarbons to be present in the river downgradient of AOC 1. All surface water sample results were reported below detection limits. An interim remedial system will be installed downgradient of AOC 1. The remedial system design will be completed in coordination with the Navy prior to being submitted to the TNRCC for approval and will be included in the Corrective Action Plan prepared for AOC 1.

The final Site Assessment Report for SWMU 68 (the Petroleum, Oil, and Lubricants Tank Farm) and AOC 7 (the former Base Refueling Area) was submitted to the TNRCC in November 2000. Site closure was granted by the TNRCC on November 1, 2001. A Site Closure Request will be submitted to the TNRCC following the abandonment of the associated monitoring wells.

The TNRCC requested additional information for the USTs at Buildings 1191, 1750, and 1518 in order to complete the site review process. The requested information was compiled and submitted in January 2002. The Release Determination Report for the UST at Building 1411 was modified to include the same information (that was requested for 1191, 1750 and 1518) prior to submittal to the TNRCC. Site Assessment Reports and Site Closure Requests were completed in January 2002 for the USTs at Buildings 1427 and 4210.

RCRA FACILITY INVESTIGATION OF OIL/WATER SEPARATORS

An RFI is being conducted on 21 oil water separators (OWS) sites at NAS Fort Worth JRB. Based on the results of the initial investigation, one OWS (SWMU 7) received closure in July 2000 based on evidence that a release of hazardous constituents to the environment has not occurred from this unit. An RFI Report for five additional OWS sites at Buildings 1101, 1320, 1423, 1656, and 4160 was submitted to the regulators for

closure, also based on evidence of no release, in December 2000. The TNRCC granted No Further Action status for these five sites in a letter dated March 23, 2001.

Investigations will continue at the remaining 15 sites before closure can be requested. Phase III Work Plans for 14 OWS sites were submitted in November 2000, and the field work was completed soon thereafter. A Final RFI report requesting closure for 13 of these sites at Buildings 1015, 1027, 1060, 1064, 1190, 1191, 1194, 1414, 1602, 1643, 3358, 4146, and 4210 was submitted to the TNRCC for review in May 2001. An addendum report was prepared for 10 of these sites based on comments received from TNRCC, and this addendum is being reviewed by AFCEE. The one remaining OWS site (Building 1655) required additional investigation that was conducted in June 2001. The Draft RFI Report for the Building 1655 OWS was submitted to AFCEE for review last month. The OWS at Building 1145 (AOC 13) has been removed and was approved for closure by TNRCC in October 2001.

ONLINE DOCUMENTS FOR CARSWELL

All documents published in the Carswell Administrative Record/Information Repository can be obtained from the web site hosted by AFCEE for the Carswell AFB Restoration Advisory Board. The address is <http://www.afcee.brooks.af.mil/er/carswell/nasfw/rab/rab.htm>.

CARSWELL OFF-BASE

SANITARY SEWER SYSTEM RFI

Results from Phase II soil and groundwater sampling in March 2000 have verified that most sections of the Sanitary Sewer may be recommended for closure. However, a Phase III RFI is required to complete confirmation and/or delineation of some contaminants at specific locations along the NAS Sanitary Sewer Lines only. The Phase III RFI began on 14 February 2001, and the sampling and analysis results indicate certain specific locations will require some hot spot removals. Programming action is under way to approve the removal of the hot spots, so the remediation actions can commence shortly. The hot spots removals are scheduled to commence in March 2002.

OFF-SITE WEAPON STORAGE AREA

All field work has been completed, and areas of previous excavation have been filled and regraded. The Draft Final Closure Report for Removal of Hazardous/Non-Hazardous Wastes was submitted to the regulators in September 2000. TNRCC/U.S. EPA approval for closure under Risk Reduction Standard 2 was received on 5 February 2001. The Deed Certification also has been completed for the entire Weapon Storage Area (WSA) site. Final closure of three underground storage tanks, which were removed under the TNRCC Petroleum Storage Tank Division, should be approved by TNRCC in March 2002.

AEROSPACE MUSEUM SITE

The results of the sampling and analysis for the Aerospace Museum Site were briefed to the regulatory agencies at the Base Realignment and Closure (BRAC) Cleanup Team Meeting held on 10 May 2001. The area has met regulatory RRS 2 except for one location. Hot spot removal has been conducted in the one area to bring it within the RRS 2 criteria, and a report has been submitted to the regulatory agencies for their approval of closure under RRS 2.

PROPERTY TRANSFERS

- Property transfer for the Kings Branch Housing Area was completed in October 2000.
- Property transfer for the Federal Bureau of Prisons was completed on 15 December 2000.
- Property transfer for the Stables was completed 1 August 2001.
- The Finding of Suitability to Transfer (FOST) for the WSA is being developed.
- The Finding of Suitability to Lease (FOSL) for Expansion of the Golf Course to include Landfill 6 was signed by AFBCA on 5 October 2001.

RCRA PERMIT RENEWAL UPDATE

The RCRA permit for Carswell AFB, Texas, was signed by the TNRCC on 2 May 1990 and became effective 7 February 1991. It is required to be updated and renewed every 10 years. The permit renewal application was submitted to the regulatory agency on 1 February 2001, and the permit approval is projected to be approved by November 2002. The permit renewal with amendment is an institutional control to ensure Corrective Actions continue until all of the U.S. Air Force sites located both on NAS Fort Worth JRB and on the former Carswell AFB property off-base, are closed. Currently, only sites located on NAS Fort Worth JRB remain open.

TETRACHLOROETHENE (PCE) SITE

Some low level tetrachloroethene (PCE) soil gas contamination was previously detected at some locations in the soil in the vicinity of the Underground Petroleum Fuel Line, which is located on the Golf Course and runs parallel to Humphrey Drive. Sampling was conducted in June 2001, and no contamination was detected.

GLOSSARY OF TERMS

Area of Concern (AOC) – an area identified as a potential environmental concern.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – Also known as “Superfund,” this law was enacted in 1980 and requires the identification, investigation, and clean up of contaminated sites.

Oil/Water Separator (OWS) – an oil water separator is used to separate the oil from waste water. Oil water separators are used commonly with service stations, maintenance shops, and surface water drainage systems where surface water run off may collect oil drippings or small spills.

PCE (Tetrachloroethene) - an industrial solvent used to dissolve or disperse another substance such as oil; often used in degreasing metal parts.

Resource Conservation and Recovery Act (RCRA) – a law enacted to identify active hazardous waste generating facilities, investigate past site contamination, and initiate cleanup and pollution prevention measures.

RCRA Facility Investigation (RFI) – an investigation of soil and groundwater contamination resulting from a release of contaminants from a storage unit regulated under RCRA.

Risk Reduction Standard (RRS) – a risk-based cleanup standard for soil and groundwater defined by the Texas Natural Resource Conservation Commission.

Site Investigation (SI) – a preliminary environmental study of a site possibly contaminated by an underground storage tank used for storing petroleum products such as gasoline or aviation fuels.

Solid Waste Management Unit (SWMU) – a defined area used for storage or disposal of hazardous wastes as defined by RCRA.

Trichloroethene (TCE) – an industrial solvent used to dissolve or disperse another substance such as oil; often used in degreasing metal parts.

Underground Storage Tank (UST) – a tank installed beneath the ground surface used for storing liquids such as gasoline, aviation fuels, and waste oils.

Waste Accumulation Area (WAA) – a specified area used for temporary storage of hazardous wastes.

FOR MORE INFORMATION

If you would like more information, please see our web site at <http://www.afcee.brooks.af.mil/er/carswell/nasfw/rab/rab.htm> or contact the following individuals:

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